



# MDA5 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-01860                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Name</b>                   | IFIH1                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human IFIH1. AA range:976-1025                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>                 | MDA5 Monoclonal Antibody detects endogenous levels of MDA5 protein.                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                     |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>                    | IFIH1;MDA5;CADM-140 autoantigen;Clinically amyopathic dermatomyositis autoantigen 140 kDa;EC:3.6.4.13;Interferon-induced helicase C domain-containing protein 1;RH116;Helicase with 2 CARD domains;Helicard;Interferon-induced with helicase C domain                                                                                                                                                                                                                    |
| <b>Observed Band</b>               | 120kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Calculated Molecular Weight</b> | 120kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Cell Pathway</b>                | Cytoplasm . Nucleus . Mitochondrion . Upon viral RNA stimulation and ISGylation, translocates from cytosol to mitochondrion. May be found in the nucleus, during apoptosis.                                                                                                                                                                                                                                                                                              |
| <b>Tissue Specificity</b>          | Widely expressed, at a low level. Expression is detected at slightly highest levels in placenta, pancreas and spleen and at barely levels in detectable brain, testis and lung.                                                                                                                                                                                                                                                                                          |
| <b>Function</b>                    | disease:Genetic variation in IFIH1 is associated with insulin-dependent diabetes mellitus 19 (IDDM19) [MIM:610155].,function:RNA helicase that, through its ATP-dependent unwinding of RNA, may function to promote message degradation by specific RNases. Seems to have growth suppressive properties. Involved in innate immune defense against viruses. Upon interaction with intracellular dsRNA produced during viral replication, triggers a transduction cascade |



involving MAVS/IPS1, which results in the activation of NF-kappa-B, IRF3 and IRF7 and the induction of the expression of antiviral cytokines such as IFN-beta and RANTES (CCL5). ATPase activity is specifically induced by dsRNA. Essential for the production of interferons in response to picornaviruses., induction:By IFN-beta and TNF-alpha.,miscellaneous:In HIV-1 infected HeLa-CD4 cells, overexpression of IFIH1 results in a great increase in t

#### Background

DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein that is upregulated in response to treatment with beta-interferon and a protein kinase C-activating compound, mezerein. Irreversible reprogramming of melanomas can be achieved by treatment with both these agents; treatment with either agent alone only achieves reversible differentiation. Genetic variation in this gene is associated with diabetes mellitus insulin-depend

#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using MDA5 Monoclonal Antibody